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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,248	06/09/2005	Steven L. Williamson	10555-103	3294
757	7590	10/31/2006	EXAMINER	
BRINKS HOFER GILSON & LIONE			DOAN, JENNIFER	
P.O. BOX 10395			ART UNIT	
CHICAGO, IL 60610			PAPER NUMBER	
			2874	

DATE MAILED: 10/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/538,248

Applicant(s)

WILLIAMSON, STEVEN L

Examiner

Jennifer Doan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 22-27 is/are allowed.
- 6) ☒ Claim(s) 1,3-9 and 14-18 is/are rejected.
- 7) ☒ Claim(s) 2,10-13,19-21 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Applicant's communication filed on July 18, 2006, has been carefully studied by the Examiner. The arguments advanced therein, considered together with the amendment made to the claims, are persuasive. However, in view of further search, a relevant document is found applicable to the claims; therefore, a previous office action is withdrawn and a new rejection is set forth below. This action is **not** made final.

Specification

1. Applicants' cooperation is requested in correcting any errors of which applicants may become aware in the specification.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
3. Claims 1, 3-9 and 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seguin (U.S. 6,574,411).

With respect to claim 1, Seguin (figure 3) discloses a method for forming an attachment to an optical fiber comprising the steps of positioning the optical fiber (10) over hot pad (22, 24); aligning the optical fiber (10); raising the optical fiber (10); positioning solder (26, 28) preforms on the hot pad (22, 24); melting the solder (26, 28) preforms into molten solder; lowering the optical fiber (10) into the molten solder and cooling the solder to form an attachment between the optical fiber and the hot pad (column 1, lines 29-35; column 2, lines 22-36 and column 3, lines 16-30).

With respect to claim 16, Seguin (figure 3) discloses an optical fiber attachment comprising a hot pad (22, 24); solder (26, 28) positioned on the pad, the solder attaching the fiber (10) to the hot pad.

Seguin does not disclose the solder is made of glass. However, the solder being made of glass is considered to be obvious. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the material as claimed to make the solder for bonding the optical fiber to the hot pad of Seguin's device for the purpose of providing more security for the optical fiber in the optical device and it is also noted that it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

With respect to claim 3, Seguin discloses the method, wherein the melting includes passing current through the hot pad to heat the hot pad (column 2, lines 27-30).

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With respect to claim 4, Seguin discloses the method, wherein the cooling includes removing the current to the hot pad (column 1, line 35 and column 2, line 36). Seguin clearly discloses the steps of heating by flowing electrical current therethrough (column 2, lines 29-30) and then cooling the solder (column 1, line 35 and column 2, line 36). Although Seguin does not explicitly teach how to cool, it is understood that the cooling step must be by removing the current to the hot pad (since the heating step by flowing electrical current therethrough). Therefore, the cooling step includes removing the current to the hot pad is inherently disclosed in Seguin.

With respect to claim 5, Seguin substantially discloses all the limitations of the claimed invention except the voltage applied to the hot pad is in the range between about 18-22 volts.

However, the voltage applied to the hot pad being in the range between about 18-22 volts is considered to be obvious. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the voltage applied to the hot pad of Seguin's device within the range as claimed for the purpose of obtaining the better attachment for the optical fiber, and it also has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art and it is noted that the applicant does not disclose criticality in the ranges claimed. *In re Aller*, 105 USPQ 233 (see MPEP § 2144.05).

With respect to claims 6 and 7, Seguin discloses the method, wherein the positioning the optical fiber includes positioning the optical fiber a predetermined height above the hot pad and the lowering the optical fiber to the predetermined height (see figure 3).

With respect to claims 8 and 9, Seguin substantially discloses all the limitations of the claimed invention except the melting occurs at about 300°C or 320°C.

However, the melting occurring at about 300°C or 320°C is also considered to be obvious. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the melting temperature with the value as claimed into the Seguin's device for the purpose of obtaining the better attachment for the optical fiber, and it also has been held that discovering an optimum value of a result effective variable involves only routine skill in the art and it is noted that the applicant does not disclose criticality in the value claimed. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980) (see MPEP § 2144.05).

With respect to claims 14 and 15, Seguin discloses the method, wherein the melting includes heating the solder with a laser (column 3, line 28) or with an inductive heater (column 3, lines 28-29).

With respect to claim 17, Seguin (figure 3) discloses the optical fiber, wherein the hot pad includes a substrate (12) (column 4, lines 9-10).

With respect to claim 18, Seguin substantially discloses all the limitations of the claimed invention except the substrate is made of alumina. However, the substrate being made of alumina is considered to be obvious. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the material as claimed to make the substrate of Seguin's device for the purpose of providing more protection for an optical device and it is also noted that it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Allowable Subject Matter

4. Claims 2, 10-13 and 19-21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art fails to disclose or reasonably suggest a method and an apparatus of an optical fiber attachment, wherein the optical fiber is grasped with tweezers to control the movement of the optical fiber as recited in claim 2; the aligning includes aligning relative to an optoelectronic component as recited in claim 10; the aligning includes aligning relative to terahertz transceiver as recited in claim 13 and heat is removed from one side of the substrate to concentrate heat to the opposite side of the substrate, the solder glass being positioned on the opposite side as recited in claim 19.

5. Claims 22-27 are allowed.

The prior art fails to disclose or reasonably suggest an optical fiber attachment comprising the hot pad includes a resistive element positioned adjacent a surface of the substrate, a center pad positioned on a surface of the resistive element that is opposite of the surface of the resistive element adjacent to the substrate and a pair of side pads positioned on the same surface as the center pad and on either side of the center pad, the side pads being electrically connected through the resistive element and electrically isolated from the center pad in combination with the other limitations of claim 22.

Claims 23-27 depend from claim 22.

Response to Arguments

6. Applicant's arguments with respect to claims 1-27 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer Doan whose telephone number is (571) 272-2346. The examiner can normally be reached on Monday to Thursday from 6:00am to 3:30pm, second Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (571) 272-2344. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



JENNIFER DOAN
PRIMARY EXAMINER

JD

October 20, 2006